

ABSTRACT

5 An instrumented ball-bearing may include a rotating part, a non-rotating part, and an assembly for detecting rotation parameters. The assembly for detecting rotation parameters may include an encoder and a sensor. The sensor may be integrated with the non-rotating part. The sensor may include a sensor unit and at least a microcoil. The microcoil may have a substantially planar winding. The microcoil may be positioned in the sensor unit of the non-rotating part such that the microcoil may be positioned axially opposite the encoder.